## WHAT IS CLAIMED IS:

5

15

1. A brake drum for a wet-type band brake having a large number of grooves substantially along the circumferential direction on a slide contact surface with the brake band, wherein:

each adjacent grooves are smoothly linked to each other through a substantially convex arcuate cross sectional-portion.

- 2. A brake drum for a wet-type band brake having a large number of grooves substantially along the circumferential direction on a slide contact surface with the brake band, wherein:
  - a land is formed between each adjacent grooves and said land and said grooves are smoothly linked to each other through a substantially convex arcuate cross sectional-portion.
- 3. A rotatory drum for a wet-type brake band according to Claim 1 or 2, wherein said grooves are formed by cutting work while said substantially convex arcuate cross sectional-portion is formed by rolling process.
- 4. A rotatory drum for a wet-type brake band according to Claim 1 or 2, wherein said grooves and said substantially convex arcuate cross sectional-

portion are both formed by rolling process.

- 5. A brake drum for a wet-type band brake according to Claim 1 or 2, wherein said grooves are formed at a pitch of 0. 05mm to 0. 3mm in a dimensional range of 0. 5μm to 50μm in depth and of 0. 05mm to 0. 3mm in width.
- 6. A brake drum for a wet-type band brake
  according to Claim 3, wherein said grooves are formed
  at a pitch of 0. 05mm to 0. 3mm in a dimensional
  range of 0. 5μm to 50μm in depth and of 0. 05mm to 0.
  3mm in width.
- 7. In a method for manufacturing a brake drum for a wet-type band brake having a large number of grooves substantially along the circumferential direction on a slide contact surface with the brake band, a method for processing the surface of the brake drum comprises the steps of:

forming the grooves by cutting work; and forming a border portion between each adjacent grooves in a substantially convex arcuate cross section by plastic working using a forming roller.

25

5

8. In a method for manufacturing a brake drum for a wet-type band brake having a large number of

grooves substantially along the circumferential direction on a slide contact surface with the brake band, a method for processing the surface of the brake drum comprises the steps of:

5

forming the grooves by cutting work; and forming a border portion between a land existing between each adjacent grooves and said grooves in a substantially convex arcuate cross section by plastic working using a forming roller.

10

15

20

25

9. In a method for manufacturing a brake drum for a wet-type band brake having a large number of grooves substantially along the circumferential direction on a slide contact surface with the brake band, a method for processing the surface of the brake drum comprises the steps of:

forming said grooves and, at the same time, forming a border portion between each adjacent grooves in a substantially convex arcuate cross section by plastic working using a forming roller.

10. In a method for manufacturing a brake drum for a wet-type band brake having a large number of grooves substantially along the circumferential direction on a slide contact surface with the brake band, a method for processing the surface of the

brake drum comprises the steps of:

forming said grooves and, at the same time, forming a border portion between a land existing between each adjacent grooves and said grooves in a substantially convex arcuate cross section by plastic working using a forming roller.

5

10

11. A method for processing the surface of a brake drum for a wet-type band brake according to any one of Claims 7 to 10, wherein said grooves are formed at a pitch of 0. 05mm to 0. 3mm in a dimensional range of 0. 5µm to 50µm in depth and of 0. 05mm to 0. 3mm in width.